



# UNITED STATES PATENT AND TRADEMARK OFFICE

*en*

UNITED STATES DEPARTMENT OF COMMERCE  
United States Patent and Trademark Office  
Address: COMMISSIONER FOR PATENTS  
P.O. Box 1450  
Alexandria, Virginia 22313-1450  
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/711,540	09/24/2004	Kai-Kuang Ho	13365-US-PA	5539

31561 7590 11/29/2006

JIANQ CHYUN INTELLECTUAL PROPERTY OFFICE  
7 FLOOR-1, NO. 100  
ROOSEVELT ROAD, SECTION 2  
TAIPEI, 100  
TAIWAN

EXAMINER

NGUYEN, TRAM HOANG

ART UNIT	PAPER NUMBER
----------	--------------

2818

DATE MAILED: 11/29/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

<b>Office Action Summary</b>	<b>Application No.</b> 10/711,540	<b>Applicant(s)</b> HO ET AL.	
	<b>Examiner</b> Tram H. Nguyen	<b>Art Unit</b> 2818	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

#### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

#### Status

- 1) ☒ Responsive to communication(s) filed on 26 October 2006.
- 2a) ☐ This action is **FINAL**.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

#### Disposition of Claims

- 4) ☒ Claim(s) 25 and 28-34 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 25 and 28-34 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

#### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 24 September 2004 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

#### Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All    b) ☐ Some \*    c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.

#### Attachment(s)

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)                                | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)                       | 5) <input type="checkbox"/> Notice of Informal Patent Application                       |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)<br>Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____  |

### DETAILED ACTION

In response to the communications dated 10/26/2006, claims 25 and 28-34 are pending this application.

#### ***Claim Rejections - 35 USC § 102***

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless --

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 25 and 28-29 are rejected under 35 U. S. C. § 102 (b) as being anticipated by Huang. (U.S. 2003/0103339).

Regarding **claim 25**, Huang discloses a chip with polymer thereon (figure 7), comprising at least a chip (reference numeral 230) having an active surface (reference numeral 232); and polymer (reference numeral 402), disposed at periphery of the active surface of the chip extending to sidewalls of the chip (see fig. 7); a plurality of wires (reference numeral 240) electrically connecting the chip (reference numeral 230) and a carrier (reference numeral 202) for carrying the chip, wherein a portion of the wires (240) is covered by the polymer and the other portion of the wires is exposed outside of the polymer (see fig. 7).

Regarding **claim 28**, Huang discloses all the limitation of the claimed invention for the reasons set forth above; in addition, the figure 7 also shows the polymer

Art Unit: 2818

(reference numeral 402) further covers a portion of the carrier (reference numeral 202/204).

Regarding **claim 29**, Huang discloses all the limitations of the claimed invention for the reasons are set forth above; furthermore, the figure 7 shows the carrier (reference numeral 202/204) comprises a leadframe (reference numeral 204).

***Claim Rejections - 35 U.S.C. § 103***

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

Claims 30-34 are rejected under 35 U.S.C. 103 (a) as being unpatentable over Huang.

Regarding **claim 30**, Huang discloses all the limitations of the claimed invention for the reasons are set forth above; except for the polymer is shaped as a ring covering whole periphery of the active surface of the chip. However, it would have been obvious to one having ordinary skills in the art at the time the invention was made to modify shape of the polymer encapsulating as a ring covering whole periphery of the active surface of the chip so that the polymer is applied merely on the active surface and the sidewalls of the chip without extending to the carrier. Moreover, applicant has not disclosed that the polymer is shaped as a ring covering periphery of the active surface of the chip solves any stated problem or is for any particular purpose and it appears that the invention would perform equally well with polymer is shaped as any shape covering periphery of the active surface of the chip.

Regarding **claim 31**, Huang discloses all the limitations of the claimed invention for the reasons are set forth above; except for the polymer is shaped as strips covering two opposite edges of the active surface of the chip. However, it would have been obvious to one having ordinary skills in the art at the time the invention was made to modify shape of the polymer encapsulating as strips covering two opposite edges of the active surface of the chip so that the polymer is applied merely on the active surface and the sidewalls of the chip without extending to the carrier. Moreover, applicant has not disclosed that the polymer is shaped as strips covering two opposite edges of the active surface of the chip solves any stated problem or is for any particular purpose and

Art Unit: 2818

it appears that the invention would perform equally well with polymer is shaped as any shape covering periphery of the active surface of the chip.

Regarding **claim 32**, Huang discloses all the limitations of the claimed invention for the reasons are set forth above; except for the polymer is shaped as a plurality of pieces covering four corners of the active surface of the chip. However, it would have been obvious to one having ordinary skills in the art at the time the invention was made to modify shape of the polymer encapsulating as a plurality of pieces covering four corners of the active surface of the chip so that the polymer is applied merely on the active surface and the sidewalls of the chip without extending to the carrier. Moreover, applicant has not disclosed that polymer is shaped as a plurality of pieces covering four corners of the active surface of the chip solves any stated problem or is for any particular purpose and it appears that the invention would perform equally well with polymer is shaped as any shape covering periphery of the active surface of the chip.

Regarding **claims 33 and 34**, Huang discloses all the limitations of the claimed invention for the reasons are set forth above except for polymer comprises a stress buffer polymer, wherein the stress buffer polymer comprises epoxy resin or polyimide. However, it would have been obvious to one having ordinary skill in the art at the time the invention was made to include a stress buffer polymer which comprising epoxy resin or polyimide, since it has been held to be within the general skill of a worker in the art to select a known material on the basis of its suitability for the intended use. In re Leshin, 125 USPQ 416.

**Conclusion**

When responding to the office action, Applicants are advised to provide the examiner with the line numbers and page numbers in the application and/or references cited to assist the examiner to locate the appropriate paragraphs.

A shortened statutory period for response to this action is set to expire 3 (three) months and 0 (zero) day from the day of this letter. Failure to respond within the period for response will cause the application to become abandoned (see M.P.E.P 710.02(b)).

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Tram Hoang Nguyen whose telephone number is (571) 272-5526. The examiner can normally be reached on Monday-Friday 9:00am - 6:00pm. If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Mathew Smith can be reached on (571) 272-1907. The fax numbers for all Customer Service is (571) 273-8300.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (571)272-1625.

**THN**  
Art Unit 2818  
11/21/2006

*Andy Hung*  
Andy Hung  
Primary Examiner